CLAIMS

1. A BEMF detection circuit for a voice-coil motor operative to continually generate a signal proportionally to the velocity of said voice-coil motor comprising a algebraic summing node producing at its output the

5   BEMF of the voice-coil motor and receiving:

a first voltage proportional to the voltage across the voice-coil motor;

a second voltage representing the product of a first multiplier factor and a voltage proportional to the current in the coil;

a third voltage representing the product of a prefixed bias voltage Vref

10   and a second multiplier factor;

said third voltage is calibrated by a single calibration circuitry operative to calibrate said second multiplier factor in response to a calibration control signal, in order to cancel said second voltage.

2. BEMF detection circuit according to claim 1, wherein said single

15   calibration circuitry comprises: an resistive element having a first and a second terminal including a plurality of resistances connected in series, the first terminal is coupled to a prefixed bias voltage and the second terminal is receiving a signal proportional to the current in the coil;

said plurality of resistances are connected to a plurality of controlled

20   switches controlled by said calibration control signal, a terminal of each of said switches are connected together to form a node, on said node is possible to take a portion of the voltage applied on said plurality of resistances in response to said calibration control signal.

3. BEMF detection circuit according to claim 2, wherein said signal

25   proportional to the current in the coil is produced by an operational amplifier which amplify a voltage on a resistance on which the current in the coil is flowing.

4. A BEMF detection circuit for a voice-coil motor operative to continually generate a signal proportionally to the velocity of said voice-coil

30   motor such that said signal is the sum of a first signal component, a second

signal component and a third signal component,

the first signal component representing the product of a first multiplier factor and the voltage across the coil;

the second signal component representing the product of a second multiplier factor and the current in the coil;

the third signal component representing a signal able to eliminate said second signal component.

5. BEMF detection circuit according to claim 4, wherein said third signal component is determined in order to have amplitude equal to said second signal component and opposite sign.